



The following listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended): In a heat exchanger comprising at least one heat exchanger block, an insulating vessel which surrounds the heat exchanger block, and pipes connected to said heat exchanger block for transporting fluids to and from said heat exchanger block, the improvement wherein said heat exchanger further comprises securing means for securing the heat exchanger block hanging in the insulating vessel, and wherein said means for securing said heat exchanger block permit thermally produced changes in the lengths of said pipes connected to said heat exchange block to be compensated for by movement of said heat exchanger block,

wherein the securing means comprises a first element (3), which is fixedly connected to the heat exchanger block (1), and a second element (4), which is articulately connected to the first element (3), the second element (4) being articulately secured in the insulating vessel, and the first element comprising two plates secured to two opposites side of said heat exchanger block and said second element is a triangular plate.

2. (Previously Presented): A heat exchanger according to Claim 1, wherein said heat exchanger block has a lower end and wherein the lower end of the heat exchanger block (1) can move in at least two spatial directions.

3. (Previously Presented): A heat exchanger according to Claim 1, wherein the heat exchanger block (1) is suspended in such a manner that it can move freely above its center of gravity.

4. (Previously Presented): A heat exchanger according to Claim 1, wherein the heat exchanger comprises at least two heat exchanger blocks (1).

5. (Previously Presented): A heat exchanger according to Claim 4, wherein said pipes connected to said heat exchange block comprise feed and/or discharge lines which lead into a common connection line.

6. (Previously Presented): A heat exchanger according to Claim 1, wherein the securing means have joints (5, 7).

7. (Previously Presented): A heat exchanger according to Claim 6, wherein the securing means have two axes of rotation (6, 9) which lie perpendicular to one another.

8. (Cancelled):

9. (Previously Presented): In a low-temperature air fractionation plant comprising a principal heat exchanger and at least one fractionation column, the improvement wherein said principal heat exchanger comprises:

at least one heat exchanger block, an insulating vessel which surrounds the heat exchanger block, pipes connected to said heat exchanger block for transporting fluids to and from said heat exchanger block, and securing means for securing the heat exchanger block hanging in the insulating vessel, wherein said means for securing said heat exchanger block permit thermally produced changes in the lengths of said pipes connected to said heat exchange block to be compensated for by movement of said heat exchanger block.

10. (Previously Presented): A heat exchanger according to Claim 2, wherein the heat exchanger block (1) is suspended in such a manner that it can move freely above its center of gravity.

11. (Previously Presented): A heat exchanger according to Claim 4, comprising at least three heat exchanger blocks.

12. (Cancelled):

13. (Cancelled):

14. (Cancelled):

15. (Previously Presented): A heat exchanger according to claim 1, wherein said heat exchanger comprises ten heat exchanger blocks arranged in two rows of five blocks each.

16. (Previously Presented): A heat exchanger according to claim 1, wherein said heat exchanger comprises eight heat exchanger blocks arranged in two rows of four blocks each.

17. (Cancelled):

18. (Cancelled):

19. (Previously Presented): A heat exchanger comprising at least one heat exchanger block having an upper end and a lower end, an insulating vessel which surrounds said at least one heat exchanger block, pipes connected to the upper end and pipes connect to the lower end of said heat exchanger block for transporting fluids to and from said heat exchanger block, a first support plate attached to said heat exchange block at a first side of said upper end of said heat exchange block, a second support plate attached to said heat exchange block at a side opposite said first said of said upper end of said heat exchange block, and a third support plate attached to a support within said insulating box,

wherein said first and second support plates are pivotally attached to said third support plate whereby said lower end of said heat exchange block is free to pivot about an axis passing through the plane of said third support plate, and said third support plate is attached to said support by a joint which permits said third support plate and said heat exchange block to pivot

about an axis perpendicular to the plane of said third support plate.

20. (Previously Presented): A heat exchanger according to claim 19, wherein said third support plate is a triangular plate.

21. (Previously Presented): A heat exchanger according to Claim 19, wherein said heat exchanger comprises at least two, heat exchanger blocks.

22. (Previously Presented): A heat exchanger according to Claim 21, comprising at least four heat exchanger blocks.

23. (Previously Presented): In a low-temperature air fractionation plant comprising a principal heat exchanger and at least one fractionation column, the improvement wherein said principal heat exchanger comprises:

at least one heat exchanger block having an upper end and a lower end, an insulating vessel which surrounds said at least one heat exchanger block, pipes connected to the upper end and pipes connect to the lower end of said heat exchanger block for transporting fluids to and from said heat exchanger block, a first support plate attached to said heat exchange block at a first side of said upper end of said heat exchange block, a second support plate attached to said heat exchange block at a side opposite said first said of said upper end of said heat exchange block, and a third support plate attached to a support within said insulating box,

wherein said first and second support plates are pivotally attached to said third support plate whereby said lower end of said heat exchange block is free to pivot about an axis passing through the plane of said third support plate, and said third support plate is attached to said support by a joint which permits said third support plate and said heat exchange block to pivot about an axis perpendicular to the plane of said third support plate.

24. (Cancelled):

25. (New): An air fractionation plant according to claim 9, wherein said heat exchanger block has a lower end and wherein the lower end of the heat exchanger block (1) can move in at least two spatial directions.

26. (New): An air fractionation plant according to claim 25, wherein the heat exchanger block (1) is suspended in such a manner that it can move freely above its center of gravity.

27. (New): An air fractionation plant according to claim 9, wherein the heat exchanger block (1) is suspended in such a manner that it can move freely above its center of gravity.

28. (New): An air fractionation plant according to claim 9, wherein the heat exchanger comprises at least two heat exchanger blocks (1).

29. (New): An air fractionation plant according to claim 28, comprising at least three heat exchanger blocks.

30. (New): An air fractionation plant according to claim 28, wherein said pipes connected to said heat exchange block comprise feed and/or discharge lines which lead into a common connection line.

31. (New): An air fractionation plant according to claim 9, wherein the securing means have joints (5, 7).

32. (New): An air fractionation plant according to claim 31, wherein the securing means have two axes of rotation (6, 9) which lie perpendicular to one another.

33. (New): An air fractionation plant according to claim 9, wherein the securing

means have a first element (3), which is fixedly connected to the heat exchanger block (1), and a second element (4), which is articulately connected to the first element (3), the second element (4) being articulately secured in the insulating vessel.

34. (New): An air fractionation plant according to claim 33, wherein said first element comprises two plates secured to two opposites side of said heat exchanger block and said second element is a triangular plate.

35. (New): An air fractionation plant according to claim 9, wherein said heat exchanger comprises ten heat exchanger blocks arranged in two rows of five blocks each.

36. (Currently Amended): An air fractionation plant according to claim 9, wherein said heat exchanger comprises eight heat exchanger blocks arranged in two rows of four blocks each.